

Coal Mining Risk Assessment (CMRA)

Site: Land to the rear of 40 Victoria Road,
Fleur-De-Lis

Prepared For: Tony Carrafa

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Job No: 17814

REPORT TITLE : **Coal Mining Risk Assessment (CMRA): Land to the rear of 40 Victoria Road, Fleur-De-Lis, Blackwood, NP12 3UG**

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	Name	Signature
Prepared	Sam Oemering MSc, MESCI, FGS	
Checked	Ruth Howells M.Geol, FGS	
Approved	Gwyn Lake BSc (Hons). PhD, CGeol, FGS	



Executive Summary

Site Location and Proposed Development	<p>The development site is vacant land, irregular in shape and locates to the northeast of 40 Victoria Road, within the village of Fleur-de-Lis, Blackwood.</p> <p>The site centres on an approximate National Grid Reference of 315490, 196250, occupying a plan area of approximately 0.72 Hectares.</p> <p>Construction of five houses is proposed.</p>
Site History	<p>The southern part of the site was occupied by a quarry in 1878. This closed between 1920 and 1922. Later reprofiling of the site appears evident on historical plans, but it is unknown if and to what extent the quarry has been infilled. Several minor structures previously featured on the site after the quarry closed, but these are now absent.</p>
Geology	<p>The site is underlain by unknown thicknesses of superficial deposits comprised of made ground, alluvium, and glacial till. The solid geology consists of mudstones and siltstones of the Grovesend Formation.</p> <p>The upper and lower leaves of the Mynyddislwyn coal seam lie at a shallow depth beneath the site, dipping towards the north.</p>
Assessment of Potential Risk from Past Shallow Mining	<p>The Coal Authority record past shallow mining in the upper and lower leaves of the Mynyddislwyn coal seams, beneath the site at 18m and 21m depth, respectively.</p> <p>When assessing the risks from shallow mine workings, as a rule of thumb to prevent the future collapse of mine workings migrating to the surface and forming crown holes there should be a 10:1 rock head to void ratio.</p> <p>Depending on the amount of rockhead cover above any workings, this criterion is unlikely to be fully satisfied. The site is deemed to be at high risk of mining related ground instability.</p>
Assessment of Potential Ground/Mine Gas Risk	<p>The risk in terms of mine gas at the site is considered high. Investigation is therefore required to confirm the risk to the proposed development from mine gas.</p>
Recommended Further Works	<p>An intrusive rotary borehole investigation is recommended to determine the depth and thickness of coal workings beneath the site, and the requirement for any ground remedial works prior to development.</p>

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SECTION 1 Introduction and Proposed Development

1.1 Introduction

Mr Tony Carrafa (the Client) is proposing the construction of 5 houses on the land to the rear of 40 Victoria Road, Fleur-De-Lis, Blackwood, NP12 3UG.

TFW Group Ltd (Terra Firma) has been commissioned by the Client to prepare a Coal Mining Risk Assessment Desk Study Report for the site.

The main objectives of the Coal Mining Risk Assessment were to:

- Determine the type of the underlying solid geology and the depth to and amount of sound rock head cover above the shallowest workable coal seam
- Determine the risk, if any from past shallow underground mining
- Provide recommendations with regard to any other mining aspects pertaining to the development

In order to achieve the above objectives, TFW Group Ltd carried out an assessment programme including a review of existing data.

1.2 Limitations and Exceptions of Investigation

The Coal Mining Risk Assessment has been conducted and this report has been prepared for the sole internal reliance of the Client and its design and construction team. This report shall not be relied upon or transferred to any other parties without the express written authorisation of TFW Group Ltd. If an unauthorised third party comes into possession of this report they rely on it at their peril and the authors owe them no duty of care and skill.

The report represents the findings and opinions of experienced geo-environmental and geotechnical consultants. TFW Group Ltd does not provide legal advice and the advice of lawyers may also be required.

1.3 Quality Assurance

The quality and environmental aspects of the assessment comply with TFW Group Ltd business management system which is UKAS Accredited to ISO 9001:2015 and ISO 14001:2015 standards.

SECTION 2 Review of Existing Data

2.1 Physical Setting and Current Site Use

The development site is a portion of vacant land, irregular in shape and locates to the northeast of 40 Victoria Road, within the village of Fleur-de-Lis, Blackwood. The site centres on an approximate National Grid Reference of 315490, 196250, occupying a plan area of approximately 0.72 Hectares.

The site boundaries are defined by the rear gardens of residential houses to the east and south and the tree-lined River Rhymney to the northwest. The site elevation is approximately 130m AOD and is gently sloping downwards to the west.

The site location can be seen on

Figure 2.1 highlighted in red.

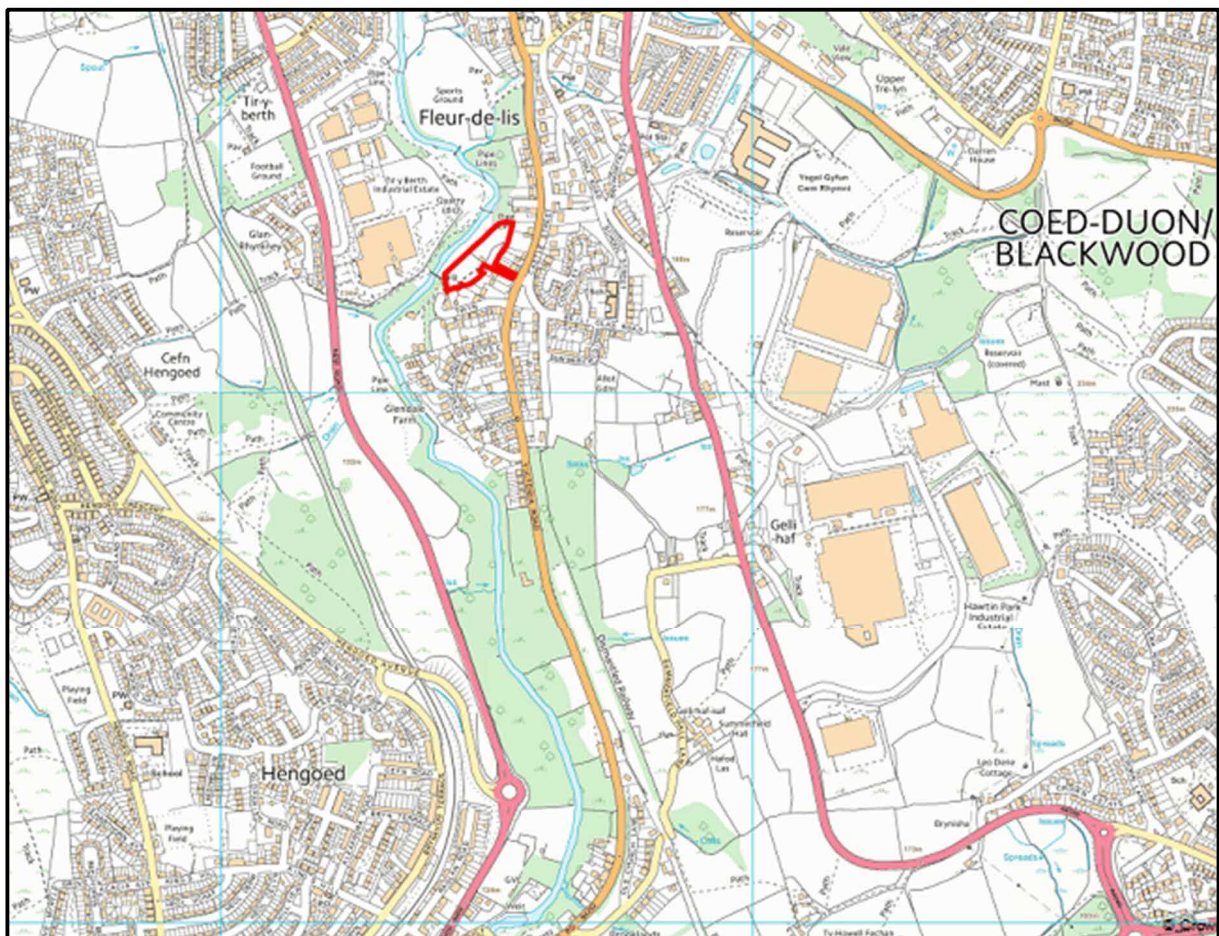


Figure 2.1 Site Location

2.2 Site History

Historical maps of the site have been obtained from Landmark Information Group. The history plans are supplied in **Annex A** of this report, and the most relevant editions are summarised in

Table 2.1. Distances, where quoted are approximate, and any changes in-between map editions may not be recorded.

Table 2.1 Historical Development from Map Information

Map Edition & Scale	Key Features on Site	Key Features off Site
1880/1878 1:2,500	The southwest of the site is occupied by a small quarry. The rest of the site is unoccupied field land.	<p>Directly to the east of the site are residential properties. The Brecon and Merthyr Railway borders the east of these houses. The Rhymney River flows parallel to the west of the site, and a sloped embankment runs between the site and the river. Beyond the river, 40m west is another small quarry surrounded by heath land/rough pasture.</p> <p>Located 75m southwest of the site are unnamed old coal levels. Situated 250m east of the site is the Tre-lyn Coal level. Located 500m northwest of the site is Glan-ddu Coal Levels.</p> <p>Glan-Rhymney, situated 275m to the west appears to be operational as an underground coal mine.</p>
1900-1901 1:2,500	The quarry has been expanded northwards to cover almost half of the site.	Glan-Rhymney appears to be disused. Tre-lyn and Glan-ddu levels are also disused. The Quarry across the river is now labelled as an old quarry.
1919-1920 1:2,500	The site is unchanged.	<p>Residential housing and a school have been built 150m east of the site.</p> <p>The old coal level 60m to the southwest appears to have been reopened.</p>
1922	The on site quarry is now labelled as 'Old Quarry'.	Situated 250m to the west, Tre-lyn colliery has been renamed as Buttery hatch colliery and is in operation again.
1953 1:10,560	The site is unchanged.	The surrounding area is mostly unchanged.
1965	The site is unchanged.	Buttery hatch colliery has been replaced by allotment gardens.
1974-1975 1:10,000	A small structure exists in the centre of the site, larger structures are present on the eastern edge, later mapping suggests these are sheds. A house is present on the spur that extends from the site to Victoria Road.	A factory has been constructed 130m to the west of the site. The quarry across the river is now labelled as disused.

1987-1989 1:1,250	The quarry on site appears to have had some reprofiling or infilling work.	The surrounding area is mostly unchanged.
1993 1:1,250	A small structure exists in the centre of the site, larger structures are present on the eastern edge, later mapping suggests these are sheds. A house is present on the spur that extends from the site to Victoria Road.	The surrounding area is mostly unchanged.
2006 1:10,000	The site remains unchanged.	The surrounding area is mostly unchanged.
2023 Aerial photo	The site remains unchanged.	The surrounding area is mostly unchanged.

2.3 Geological Setting

2.3.1 Geology

The 1:50,000 (Sheet 249) and 1:10,560 (ST19NE) scale British Geological Maps of the area were consulted for geology underlying the site. Detailed stratigraphical information is provided in **Table 2.2**.

Table 2.2 Detailed Stratigraphical Information

Period	Group	Formation
Quaternary	Quaternary	Glacial till – Poorly sorted clay, silt, sand, gravel cobbles, and boulders.
Quaternary	Quaternary	Alluvium – Poorly sorted clay, silt, sand, and gravel.
Carboniferous	Carboniferous	Grovesend Formation – Mudstones and siltstones with well developed coals and minor sandstones.

On the 1:10,560 BGS map, local dip measurements have not been recorded. However, it is possible to calculate the local dip angle from mapping information. Using this method, the strata appear to be dipping north at a dip angle of 11°.

Made ground to an unknown depth is anticipated on site. Historical plans record a slope on the western side of the site, directing down to the Rhymney River, which may indicate raising of the ground level on this side of the site, likely comprising quarry waste.

It is unknown as to whether the former quarry has been fully infilled.

Based on the information from the 1:10,560 BGS map of the area, it appears that the Mynyddislwyn Seam lies at a shallow depth beneath the site. The seam is often split into two 'leaves' and may present as one 1.75m thick seam or as two seams separated by up to 3m of rock. BGS memoirs for the area indicate that locally the separation between the 'leaves' is approximately 1m. The seam outcrops approximately 82m southwest of the site and is recorded in a shaft 229m northeast of the site at a depth of 88m. Using this information, it is possible to calculate the approximate dip angle of the seam and therefore, its estimated depth beneath the site. Given the calculated dip of 11° to the north indicated it is considered that the Mynyddislwyn Seam is likely to lie beneath the site at an approximate depth of between 16m in the southwest and 44m in the northwest. An indicative cross-section is presented in **Figure 3.1**.

A pair of faults are recorded on the 1:10,560 map, located approximately 150m to the west of the site. They trend northwest-southeast and form a graben structure.

There is one mine adit recorded on the British Geological Maps 140m southwest of the site.

An extract of the 1:10,560 map and the generalised vertical section is shown on **Figure 2.1**.

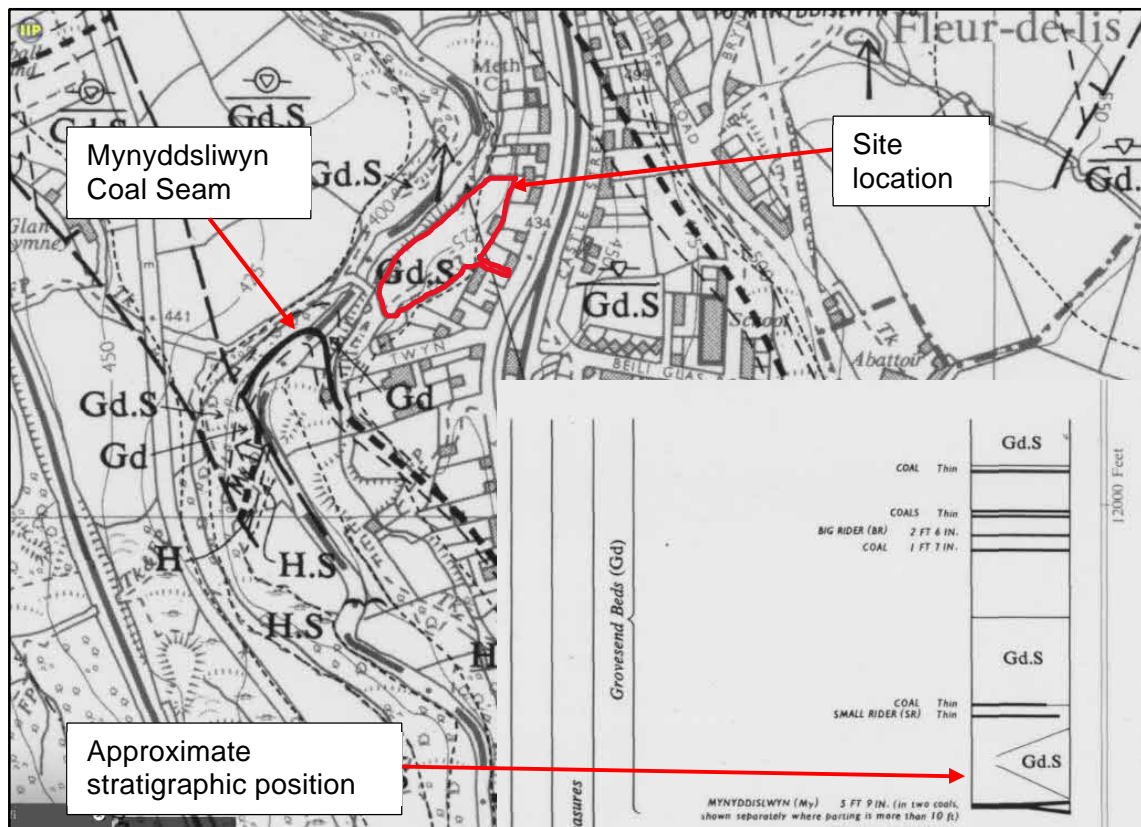


Figure 2.3 Extract from BGS Map

2.3.2 BGS Borehole Information

There are no relevant BGS Boreholes recorded within 250m of the site boundaries.

2.3.3 Mining

A consultant report was purchased from the Coal Authority. The Coal Authority Coal Mining Report is appended in **Annex B**.

The report confirms that there is recorded coal mining from 18m to 21m depth in two workings of coal beneath the site. These workings targeted the upper and lower 'leaves' of the Mynyddislwyn Seam. Mining ceased beneath the property in 1900. The next seam worked in the vicinity of the site boundary, the 6ft Bottom Seam, is at 502m depth and ceased extraction in 1947.

Recorded workings beneath the site can be seen summarised in **Table 2.2** below.

Table 2.3 Recorded Underground Workings

Colliery Name	Coal Seam	Depth (m)	Dipping Rate of Seam (degrees) & Direction of Dip	Extraction Thickness (m)	Year Last Mined
Unnamed	Mynyddislwyn Bottom Leaf	18	5.7 Northeast	2.20	1893
Unnamed	Mynyddislwyn Top Leaf	21	0.3 North	2.20	1900
Unnamed	6ft Bottom Leaf	502	2.6 South	2.00	1947

The Coal Authority, according to the report, does not believe there to be probable unrecorded shallow workings beneath the site, at or close to the surface.

The report states that there are no recorded spine roadways at shallow depths.

The Coal Authority Report records three Mine Entries in the form of adits within 100m of the site. The locations of these can be seen in the report presented in **Annex B**. These adits do not direct beneath the site.

The site is within an area of previous interest for coal mining subsidence and is within 50m of an area of previous site investigation. This can be seen in blue on the Coal Authority Summary of Findings map. This means that the Coal Authority has investigated and possibly remediated issues relating to coal mining subsidence. The report states that further investigation will be necessary and recommends ordering a **Coal Authority Subsidence Claims Report**. This is considered unnecessary as the evidence acquired already clearly shows that the site is at risk from shallow mining.

There have been no recorded mine gas incidences within 500m of the site, according to the Coal Authority. However, this cannot be discounted, and it is recommended to include a risk of coal mine gas in the site risk assessment.

SECTION 3 Coal Mining Risk Assessment

3.1 Geotechnical Risk

3.1.1 Underground Mining

Based upon geological map data, the stratigraphical sequence within 30m of the ground surface of the of the site is illustrated in **Figure 3.1**

Holocene	MADE GROUND Possible quarry spoil and/or infill of former quarry	
	Alluvium	
	Glacial Till	
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63 64 65 66 67 68 69 70 71 72 73 74 75 76 77 78 79 80 81 82 83 84 85 86 87 88 89 90 91 92 93 94 95 96 97 98 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300	Interbedded mudstone, siltstone, and minor sandstone	
	Mynyddsliwyn Coal Seam	18m depth
	Interbedded mudstone, siltstone, and minor sandstone	
	Mynyddsliwyn Coal Seam	21m depth
	Interbedded mudstone, siltstone, and minor sandstone	

Figure 3.1 Geology and Strata Base below Ground Level

There is no evidence of the thickness of the superficial deposits.

When assessing the risks from shallow mine workings, as a rule of thumb to prevent the future collapse of mine workings migrating to the surface and forming crown holes there should be a 10:1 rock head to void ratio.

Depending on the amount of rockhead cover above any workings, this criterion is unlikely to be fully satisfied for the Mynyddsliwyn Coal Seam.

Therefore, the risk to the surface stability of the site from shallow coal workings beneath the site of the site is considered high. To fully assess the risk to the site a borehole investigation will need to take place to identify the depth to any shallow workings beneath the site. Depending on the results of this investigation, drilling and grouting remediation works then may be required.

3.2 Geoenvironmental Risk

3.2.1 Mine Gas Risk Assessment

There is a high risk from mine gas at the site. There are two shallow confirmed worked seams from the Coal Authority report.

The faulted local area congruent with the coal seams poses a significant risk. The faulting may act as preferential pathways for gasses to migrate vertically and horizontally from their reservoirs, up to the surface where problems would result. Despite no faults are recorded beneath the site, there may be smaller subordinate faults extending from the primary faults to the west.

There will need to be a gas risk assessment and investigation conducted.

3.2.2 Conclusion

The overall risk to the surface stability of the site from shallow coal workings beneath the proposed buildings is considered high. It is recommended to conduct a thorough investigation involving the sinking of boreholes across the site to identify the depth to shallow workings.

The risk in terms of mine gas at the site is also considered high. Investigation is therefore required to confirm the risk to the proposed development from mine gas.

SECTION 4 Recommended Site Investigation

Due to the known presence of shallow mine workings an intrusive borehole investigation will be required. Boreholes should be positioned beneath the proposed plots/development area and extend through both Mynyddislwyn seams to establish the depth and thickness of the coal and potential workings. This will then inform whether drilling and grouting of the site is necessary.

During the intrusive investigation, ground gas monitoring wells should be installed to assess the risk from mine gas. After installation they should be monitored every two weeks for six total visits.

ANNEX A
Historical Plans

Historical Mapping Legends

Ordnance Survey County Series and Ordnance Survey Plan 1:2,500

Quarry **Gravel Pit** **Sand Pit**
Clay Pit **Shingle** **Refuse Heap**
Sloping Masonry **Flat Rock**
Marsh **Reeds** **Osiers**
Rough Pasture **Furze** **Wood**
Mixed Wood **Brushwood** **Orchard**
Fir **Ford** **Stepping Stones**
Ferry **Waterfall** **Lock**
Trig. Station **Altitude at Trig. Station**
B.M. 325.9 **Bench Mark** **Surface Level**
Arrow denotes flow of water **Antiquities (site of)**
Cutting **Embankment**
Railway crossing Road **Level Crossing** **Road crossing Railway**
Railway crossing River or Canal **Road over single stream** **Road over River or Canal**
County Boundary (Geographical)
County & Civil Parish Boundary
Administrative County & Civil Parish Boundary
County Borough Boundary (England)
County Burgh Boundary (Scotland)
Co. Boro. Bdy.
Co. Burgh Bdy.
BP BS Boundary Post or Stone **P.C.B** Police Call Box
B.R. Bridle Road **P** Pump
E.P Electricity Pylon **S.P** Signal Post
F.B. Foot Bridge **SL** Sluice
F.P. Foot Path **Sp.** Spring
G.P Guide Post or Board **T.C.B** Telephone Call Box
M.S Mile Stone **Tr.** Trough
M.P M.R Mooring Post or Ring **W** Well

Ordnance Survey Plan, Additional SIMs and Supply of Unpublished Survey Information 1:2,500 and 1:1,250

Inactive Quarry, Chalk Pit or Clay Pit **Active Quarry, Chalk Pit or Clay Pit**
Rock **Boulders**
Cliff **Slopes** **Top**
Roofed Building **Glazed Roof Building**
Sloping Masonry **Archway**
Non-Coniferous Tree (surveyed) **Coniferous Tree (surveyed)**
Non-Coniferous Trees (not surveyed) **Coniferous Trees (not surveyed)**
Orchard Tree **Scrub** **Bracken**
Coppice, Osier **Reeds** **Marsh, Saltings**
Rough Grassland **Heath** **Culvert**
Direction of water flow **Bench Mark** **Antiquity (site of)**
Cave Entrance **Triangulation Station** **Electricity Pylon**
Electricity Transmission Line
County Boundary (Geographical)
County & Civil Parish Boundary
Civil Parish Boundary
Admin. County or County Bor. Boundary
London Borough Boundary
Symbol marking point where boundary mereing changes
BH Beer House **P** Pillar, Pole or Post
BP, BS Boundary Post or Stone **PO** Post Office
Cn, C Capstan, Crane **PC** Public Convenience
Chy Chimney **PH** Public House
D Fn Drinking Fountain **Pp** Pump
EI P Electricity Pillar or Post **SB, S Br** Signal Box or Bridge
FAP Fire Alarm Pillar **SP, SL** Signal Post or Light
FB Foot Bridge **Spr** Spring
GP Guide Post **Tk** Tank or Track
H Hydrant or Hydraulic **TCB** Telephone Call Box
LC Level Crossing **TCP** Telephone Call Post
MH Manhole **Tr** Trough
MP Mile Post or Mooring Post **Wr Pt, Wr T** Water Point, Water Tap
MS Mile Stone **W** Well
NTL Normal Tidal Limit **Wd Pp** Wind Pump

Large-Scale National Grid Data 1:2,500 and 1:1,250

Cliff **Slopes** **Top**
Rock **Rock (scattered)**
Boulders **Boulders (scattered)**
Positioned Boulder **Scree**
Non-Coniferous Tree (surveyed) **Coniferous Tree (surveyed)**
Non-Coniferous Trees (not surveyed) **Coniferous Trees (not surveyed)**
Orchard Tree **Scrub** **Bracken**
Coppice, Osier **Reeds** **Marsh, Saltings**
Rough Grassland **Heath** **Culvert**
Direction of water flow **Triangulation Station** **Antiquity (site of)**
Electricity Transmission Line **Electricity Pylon**
B.M. 231.60m Bench Mark **Buildings with Building Seed**
Roofed Building **Glazed Roof Building**
Civil parish/community boundary
District boundary
County boundary
Boundary post/stone
Boundary mereing symbol (note: these always appear in opposed pairs or groups of three)
Bks Barracks **P** Pillar, Pole or Post
Bty Battery **PO** Post Office
Cemy Cemetery **PC** Public Convenience
Chy Chimney **Pp** Pump
Cis Cistern **Ppg Sta** Pumping Station
Dismtd Rly Dismantled Railway **PW** Place of Worship
EI Gen Sta Electricity Generating Station **Sewage Ppg Sta** Sewage Pumping Station
EI P Electricity Pole, Pillar **SB, S Br** Signal Box or Bridge
EI Sub Sta Electricity Sub Station **SP, SL** Signal Post or Light
FB Filter Bed **Spr** Spring
Fn / D Fn Fountain / Drinking Ftn. **Tk** Tank or Track
Gas Gov Gas Valve Compound **Tr** Trough
GVC Gas Governor **Wd Pp** Wind Pump
GP Guide Post **Wr Pt, Wr T** Water Point, Water Tap
MH Manhole **Wks** Works (building or area)
MP, MS Mile Post or Mile Stone **W** Well

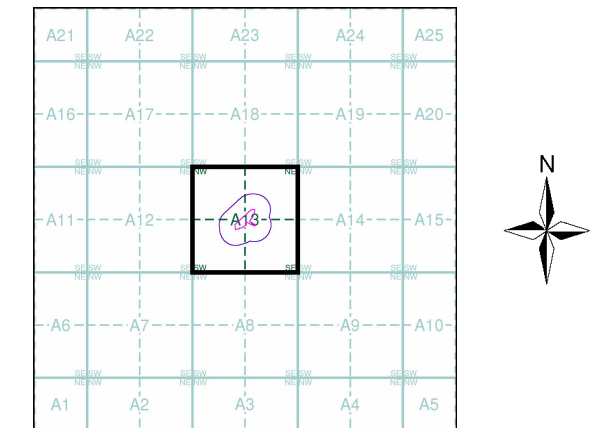


Geotechnical & Geoenvironmental Specialists

Historical Mapping & Photography included:

Mapping Type	Scale	Date	Pg
Glamorganshire	1:2,500	1877 - 1880	2
Monmouthshire	1:2,500	1878 - 1880	3
Glamorganshire	1:2,500	1900 - 1901	4
Glamorganshire	1:2,500	1919 - 1920	5
Ordnance Survey Plan	1:2,500	1960 - 1961	6
Ordnance Survey Plan	1:1,250	1974 - 1979	7
Additional SIMs	1:1,250	1983 - 1989	8
Additional SIMs	1:2,500	1989	9
Additional SIMs	1:1,250	1990	10
Large-Scale National Grid Data	1:1,250	1993	11
Large-Scale National Grid Data	1:1,250	1994 - 1995	12
Large-Scale National Grid Data	1:1,250	1995	13
Historical Aerial Photography	1:2,500	2000	14

Historical Map - Segment A13



Order Details

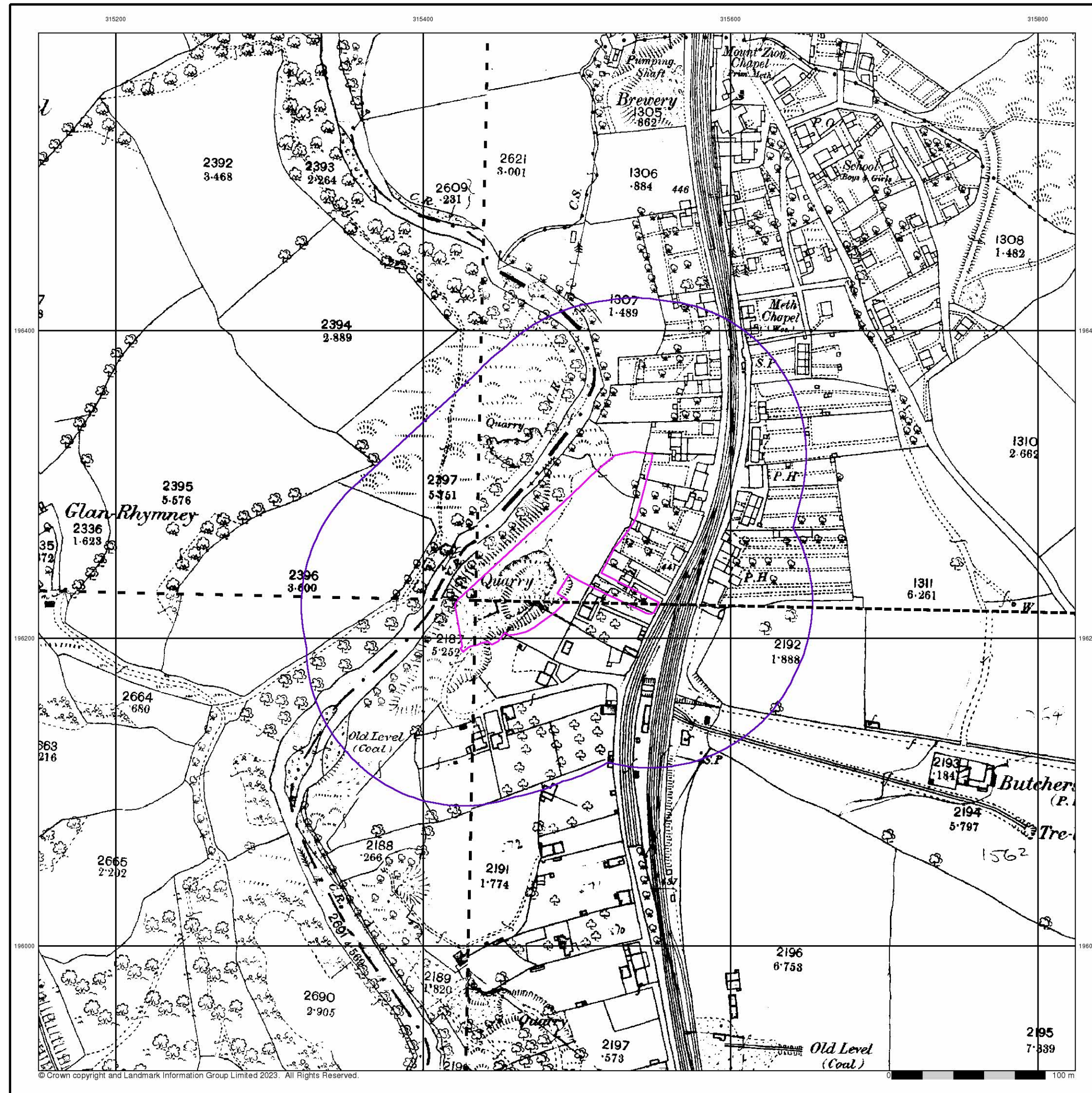
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 Customer Ref: 17814 Fleur de Lys
 National Grid Reference: 315500, 196250
 Slice: A
 Site Area (Ha): 0.72
 Search Buffer (m): 100

Site Details

Victoria Road, Fleur de Lis, Blackwood, NP12 3UG



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



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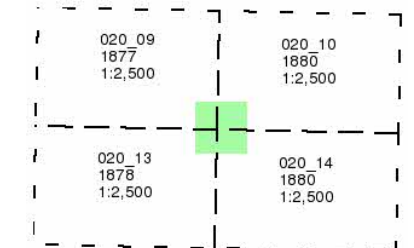
Glamorganshire

Published 1877 - 1880

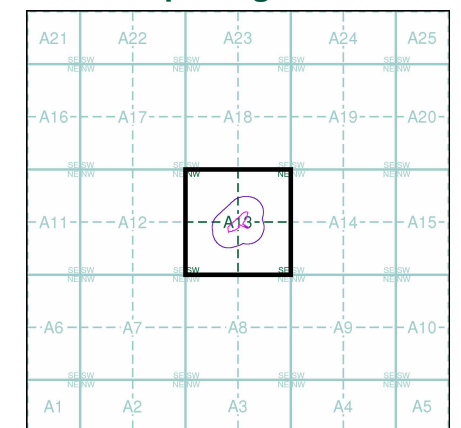
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



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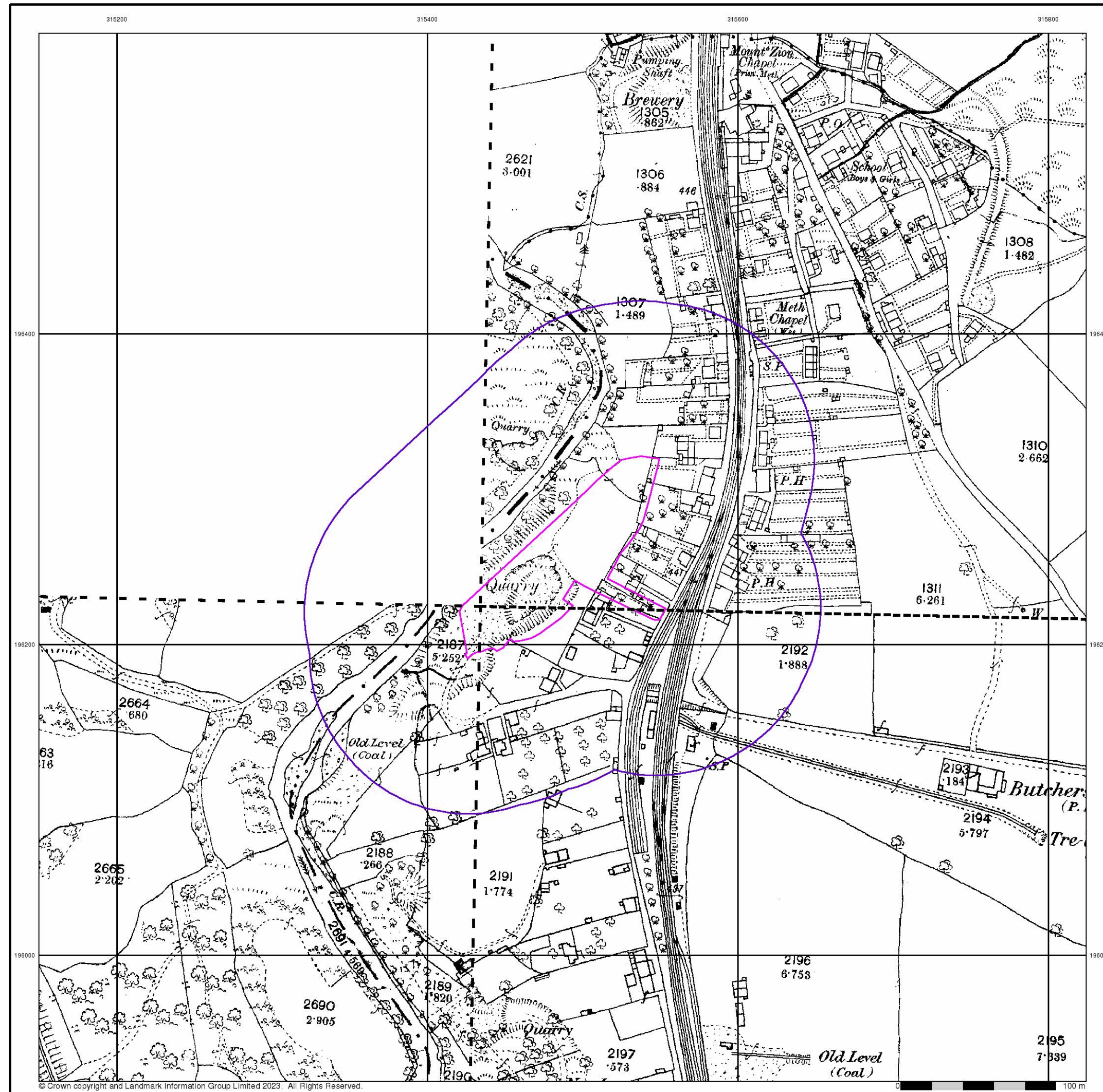
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 Customer Ref: 17814 Fleur de Lys
 National Grid Reference: 315500, 196250
 Slice: A
 Site Area (Ha): 0.72
 Search Buffer (m): 100

Site Details

Victoria Road, Fleur de Lis, Blackwood, NP12 3UG



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



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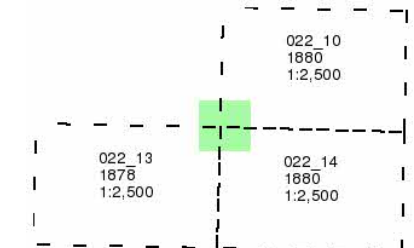
Monmouthshire

Published 1878 - 1880

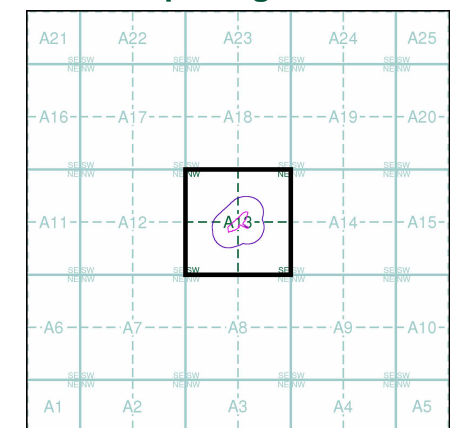
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

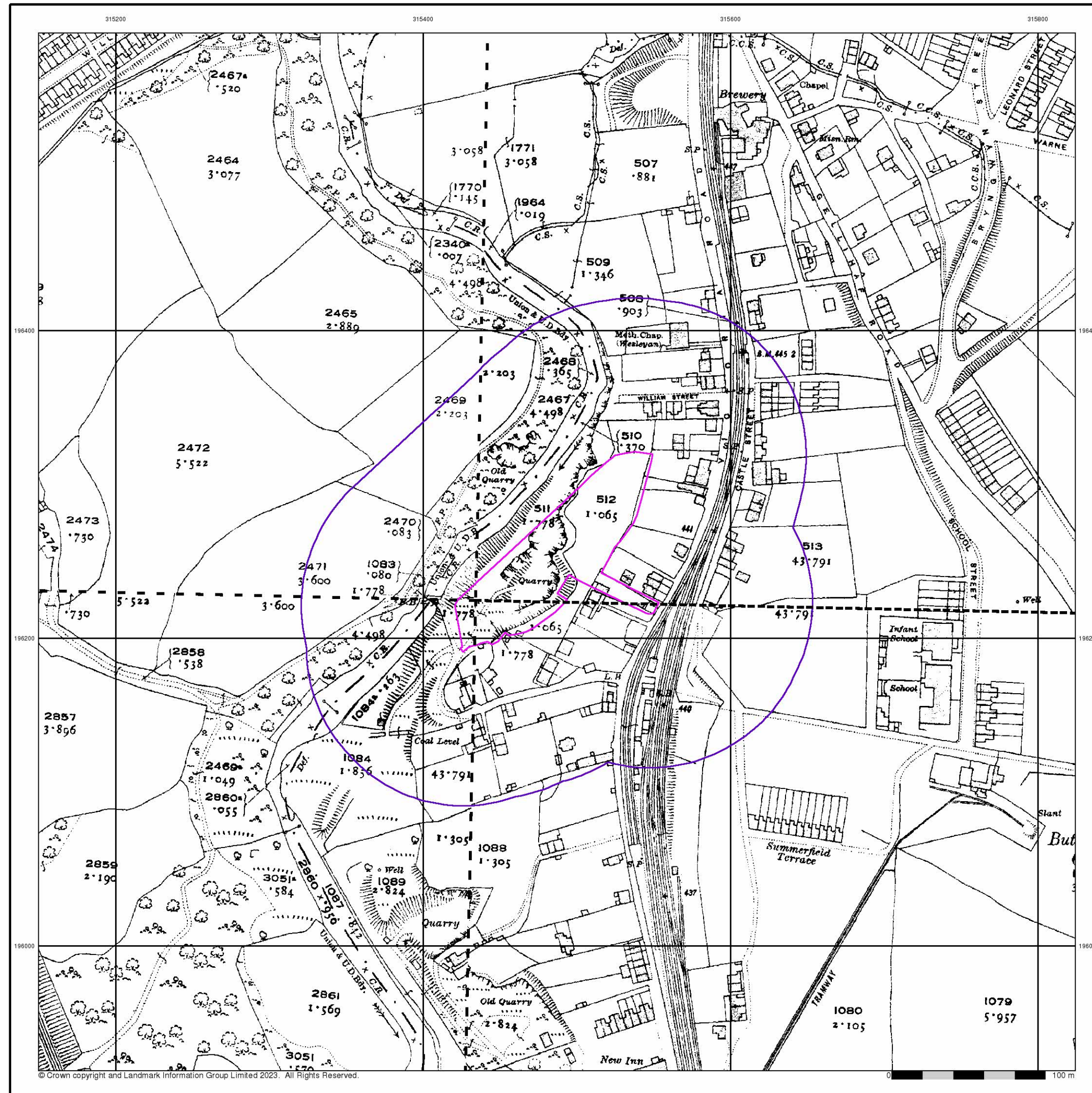
Order Number: 310124850_1_1
 Customer Ref: 17814 Fleur de Lys
 National Grid Reference: 315500, 196250
 Slice: A
 Site Area (Ha): 0.72
 Search Buffer (m): 100

Site Details

Victoria Road, Fleur de Lis, Blackwood, NP12 3UG



Tel: 0844 844 9952
 Fax: 0844 844 9951
 Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Glamorganshire

Published 1919 - 1920

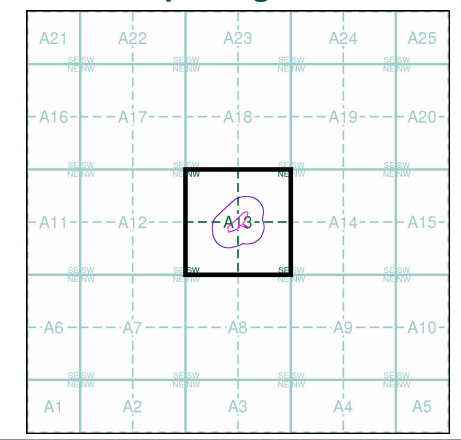
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

020_09 1919 1:2,500	020_10 1920 1:2,500
020_13 1919 1:2,500	020_14 1920 1:2,500

Historical Map - Segment A13



Order Details

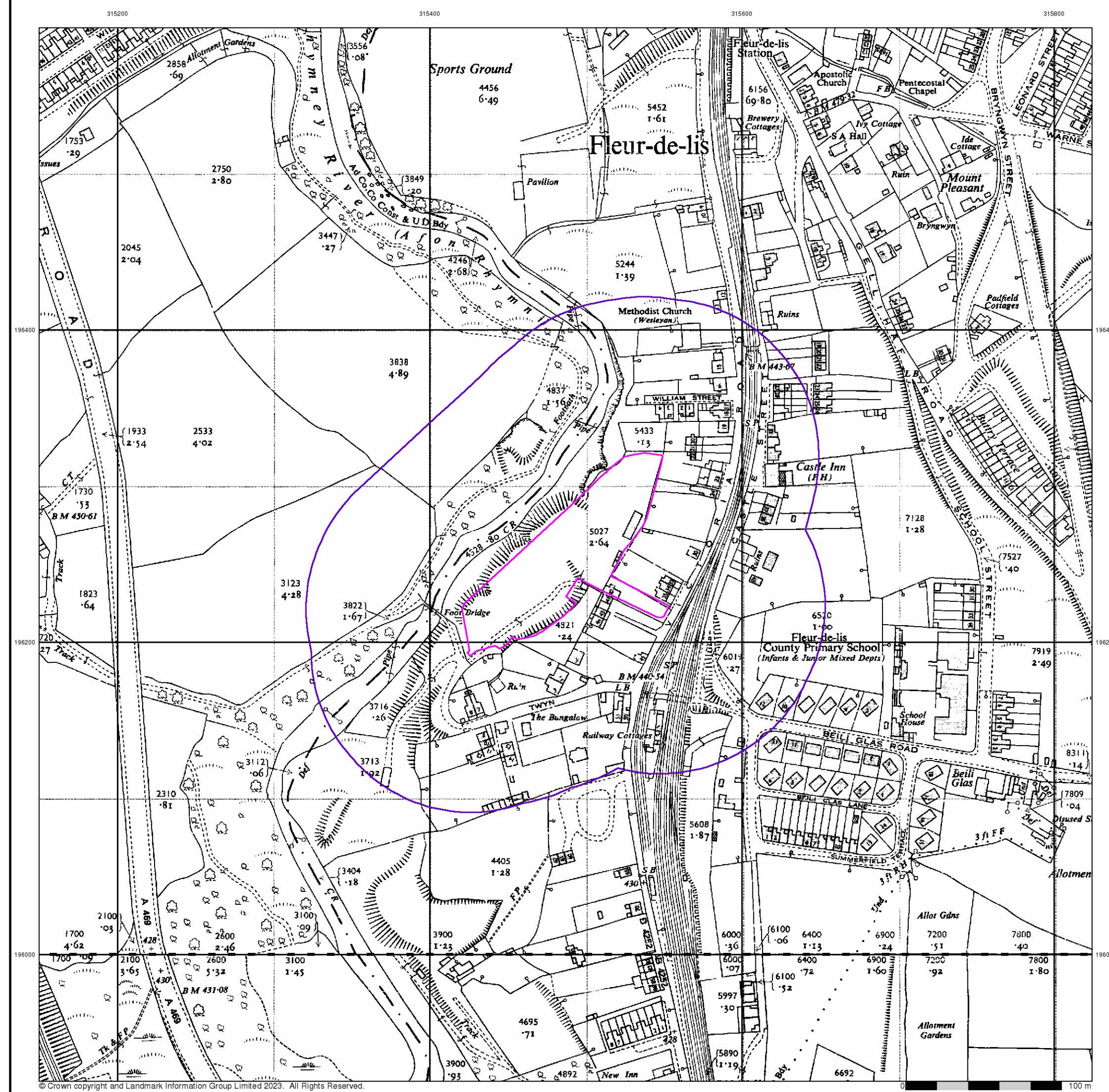
Order Number: 310124850_1_1
 Customer Ref: 17814 Fleur de Lys
 National Grid Reference: 315500, 196250
 Slice: A
 Site Area (Ha): 0.72
 Search Buffer (m): 100

Site Details

Victoria Road, Fleur de Lis, Blackwood, NP12 3UG



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 Web: www.envirocheck.co.uk



Geotechnical & Geoenvironmental Specialists

Ordnance Survey Plan

Published 1960 - 1961

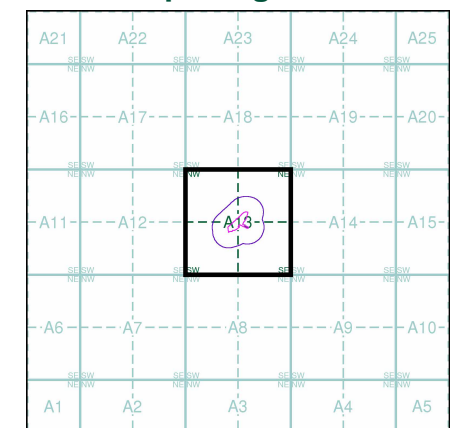
Source map scale - 1:2,500

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

ST 1596	1961	1:2,500
ST 1595	1960	1:2,500

Historical Map - Segment A13



Order Details

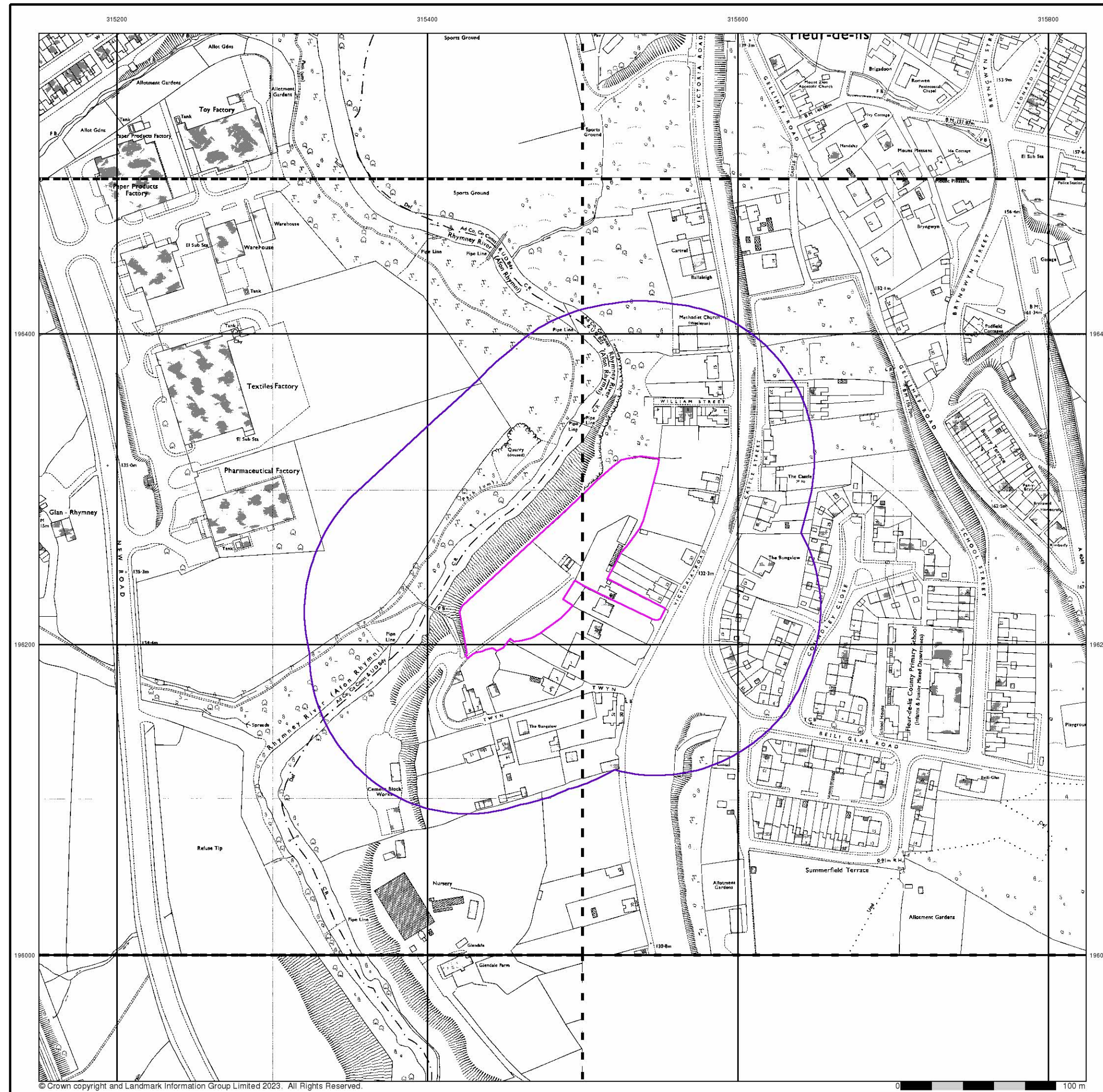
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Ordnance Survey Plan

Published 1974 - 1979

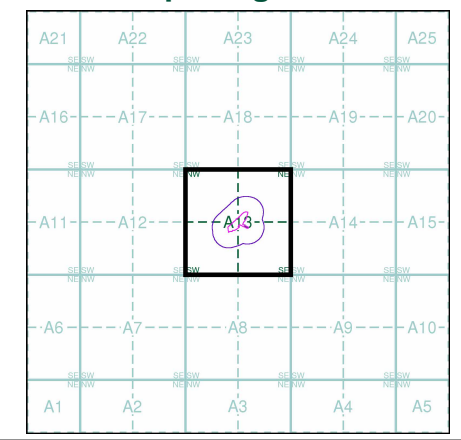
Source map scale - 1:1,250

The historical maps shown were reproduced from maps predominantly held at the scale adopted for England, Wales and Scotland in the 1840's. In 1854 the 1:2,500 scale was adopted for mapping urban areas and by 1896 it covered the whole of what were considered to be the cultivated parts of Great Britain. The published date given below is often some years later than the surveyed date. Before 1938, all OS maps were based on the Cassini Projection, with independent surveys of a single county or group of counties, giving rise to significant inaccuracies in outlying areas.

Map Name(s) and Date(s)

T1596NW	T1596NE
974	1974
1:1,250	1:1,250
T1596SW	T1596SE
974	1974
1:1,250	1:1,250
T1595NW	
979	
1:1,250	

Historical Map - Segment A13



Order Details

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Additional SIMs

Published 1983 - 1989

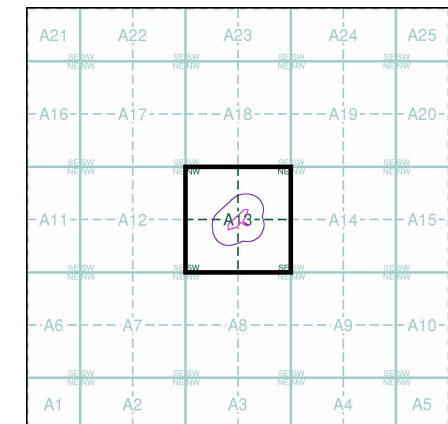
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

ST1596NW 1983 1:1,250	ST1596NE 1984 1:1,250
ST1596SW 1987 1:1,250	ST1596SE 1989 1:1,250

Historical Map - Segment A13



Order Details

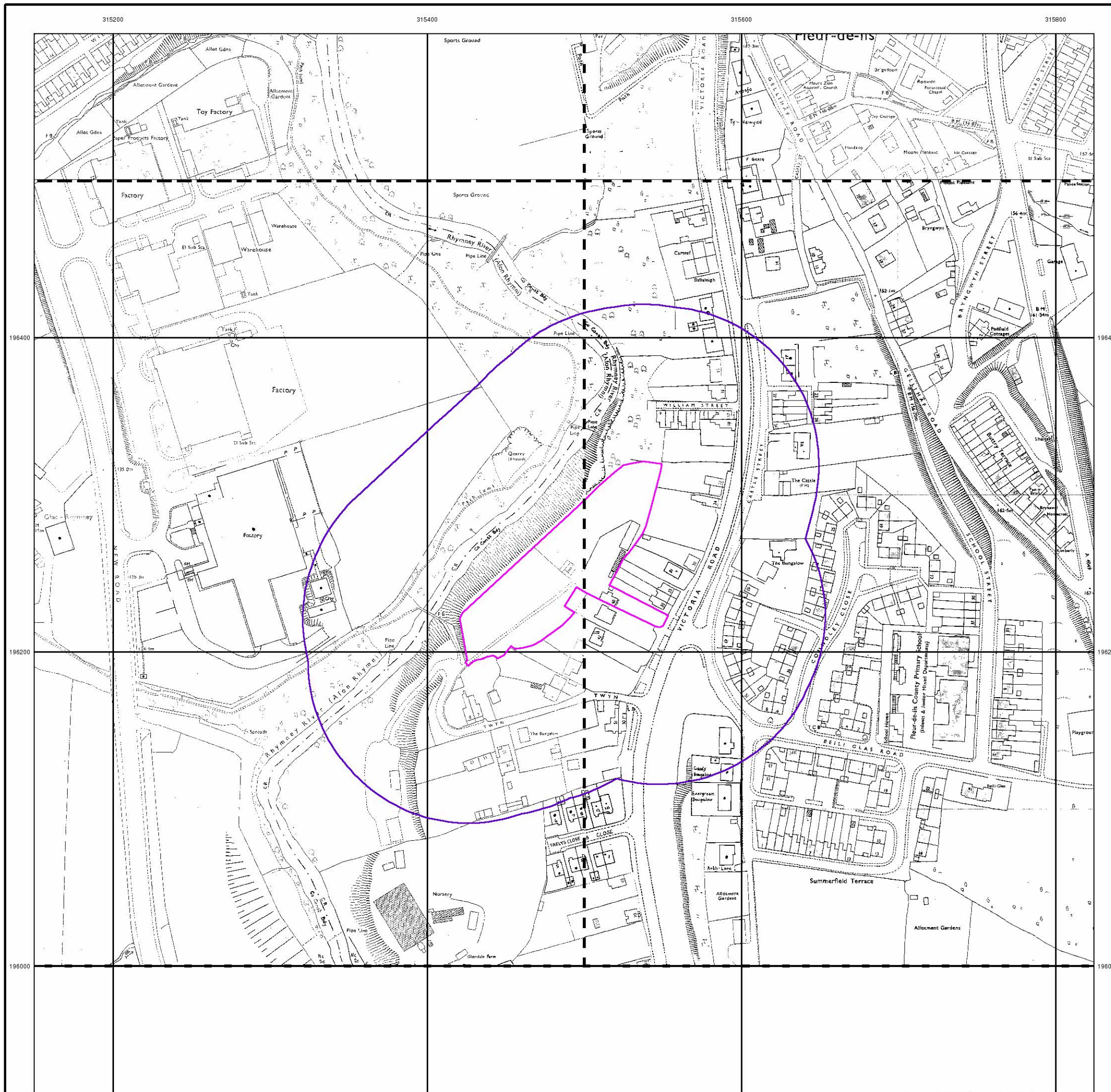
Order Number: 310124850_1_1
 Customer Ref: 17814 Fleur de Lys
 National Grid Reference: 315500, 196250
 Slice: A
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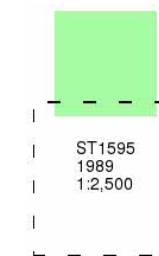
Additional SIMs

Published 1989

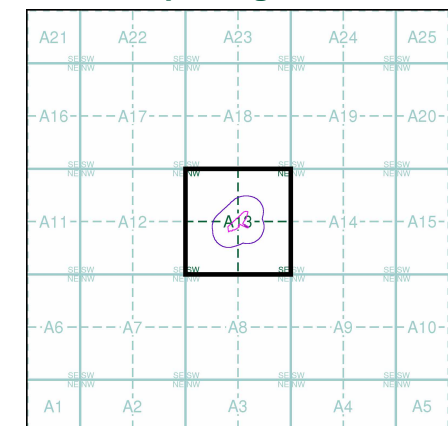
Source map scale - 1:2,500

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



Order Details

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Search Buffer (m): 100

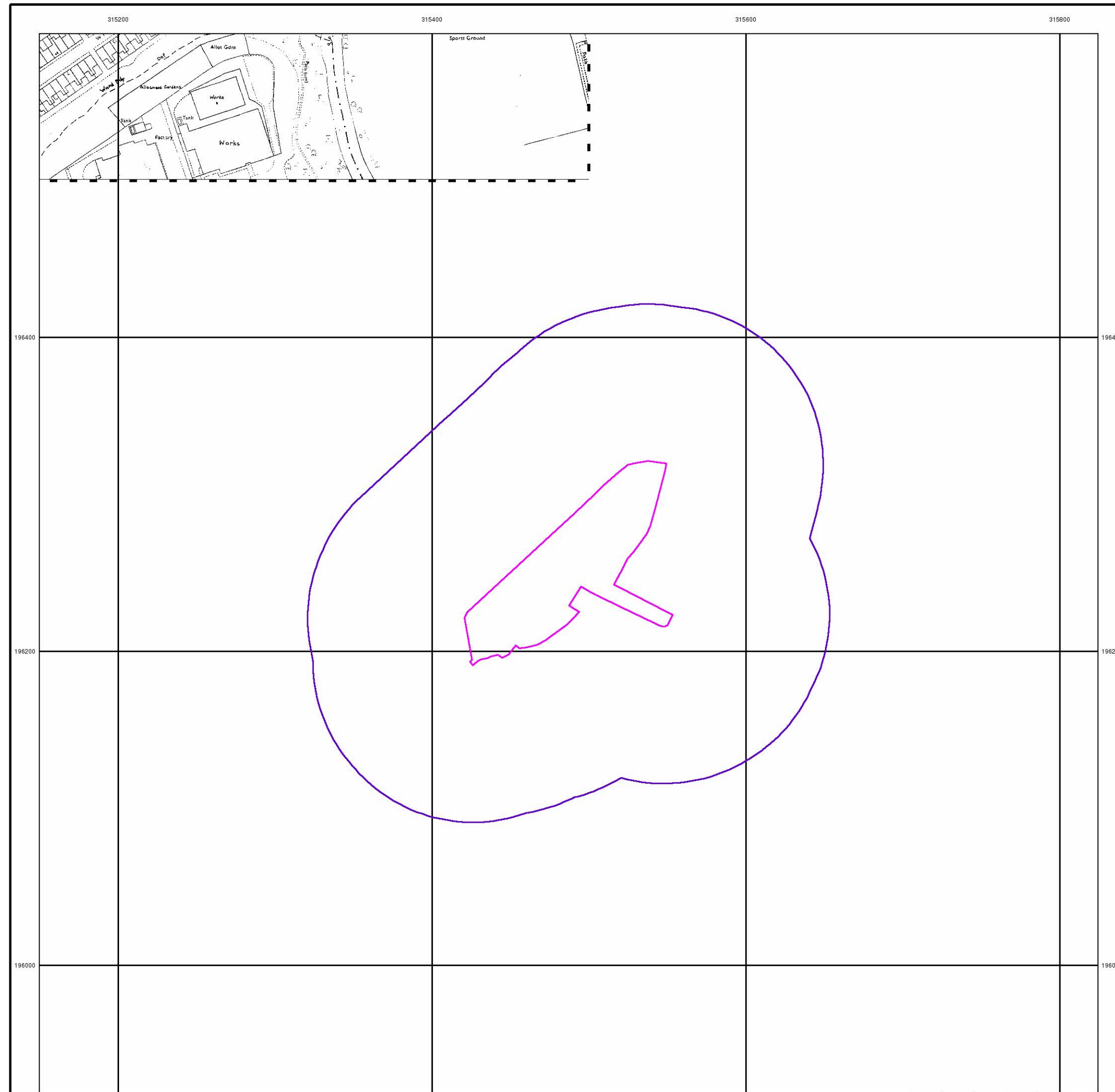
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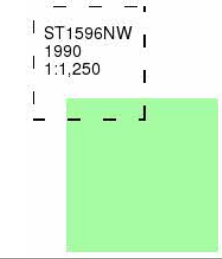
Additional SIMs

Published 1990

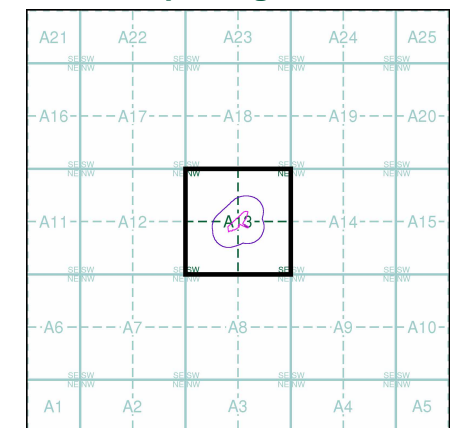
Source map scale - 1:1,250

The SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') are further, minor editions of mapping which were produced and published in between the main editions as an area was updated. They date from 1947 to 1994, and contain detailed information on buildings, roads and land-use. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



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Large-Scale National Grid Data

Published 1993

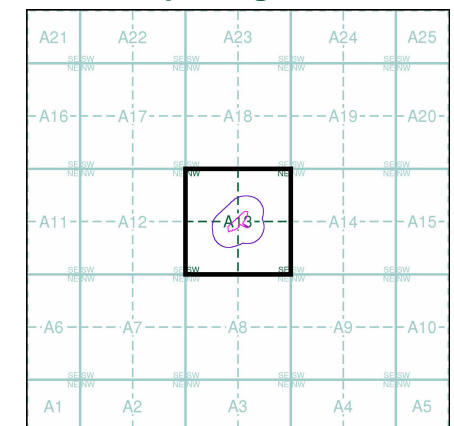
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)

TT1596NW	TT1596NE
1993	1993
1:1,250	1:1,250
TT1596SW	TT1596SE
1993	1993
1:1,250	1:1,250
TT1595NW	TT1595NE
1993	1993
1:1,250	1:1,250

Historical Map - Segment A13



Order Details

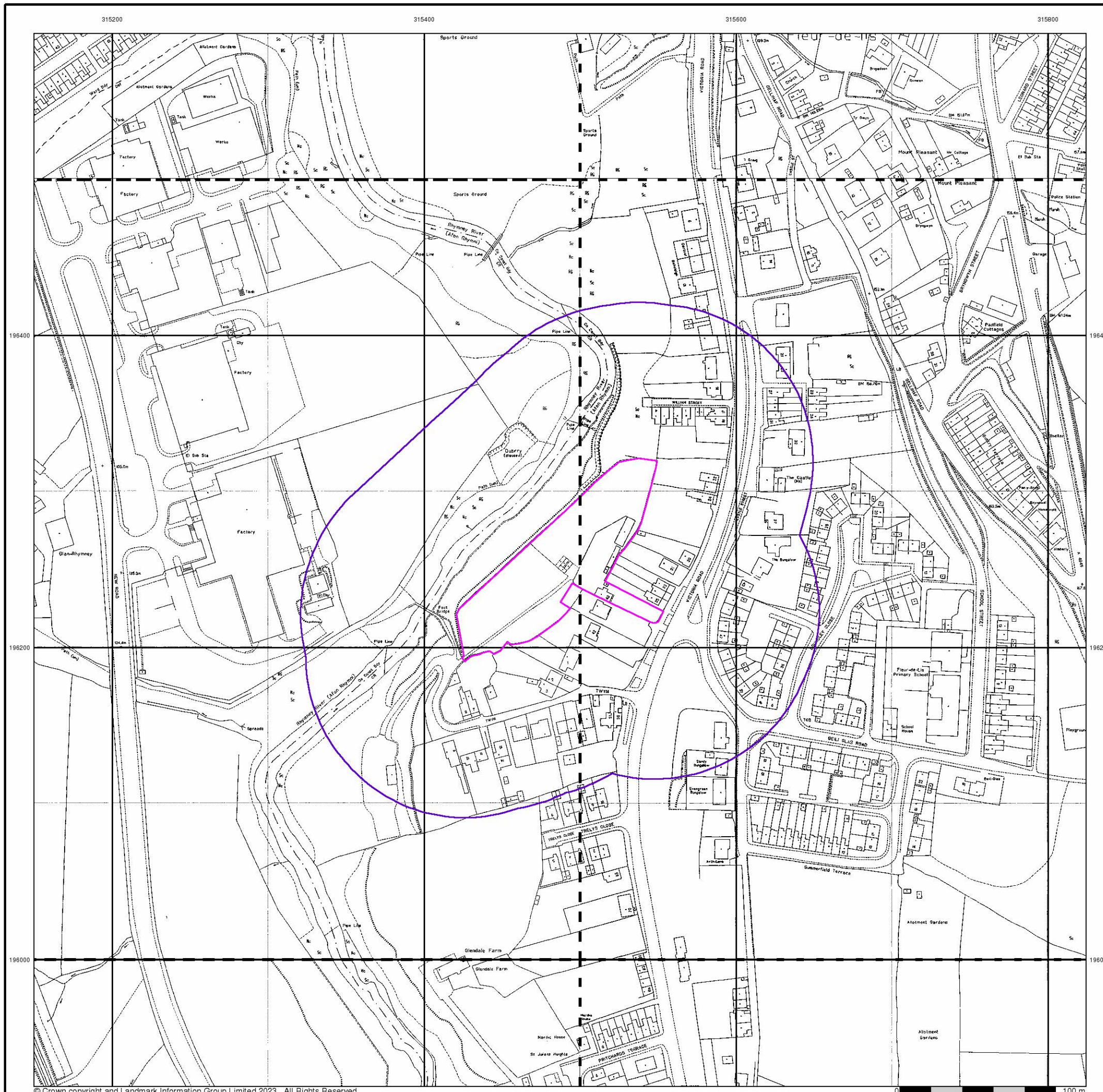
Order Number: 310124850_1_1
 Customer Ref: 17814 Fleur de Lys
 National Grid Reference: 315500, 196250
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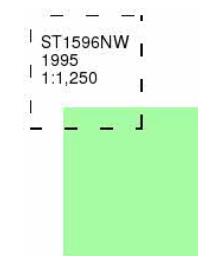
Large-Scale National Grid Data

Published 1995

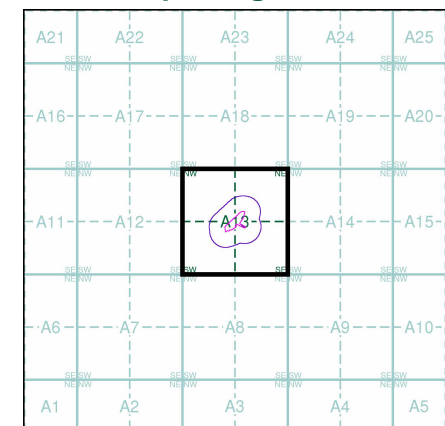
Source map scale - 1:1,250

'Large Scale National Grid Data' superseded SIM cards (Ordnance Survey's 'Survey of Information on Microfilm') in 1992, and continued to be produced until 1999. These maps were the fore-runners of digital mapping and so provide detailed information on houses and roads, but tend to show less topographic features such as vegetation. These maps were produced at both 1:2,500 and 1:1,250 scales.

Map Name(s) and Date(s)



Historical Map - Segment A13



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